

(3) Document the sequential order of BOP and auxiliary equipment testing and the pressure and duration of each test. You may reference a BOP test plan if it is available at the facility;

(4) Identify the control station or pod used during the test;

(5) Identify any problems or irregularities observed during BOP system testing and record actions taken to remedy the problems or irregularities;

(6) Retain all records, including pressure charts, driller's report, and referenced documents, pertaining to BOP tests, actuations, and inspections at the facility for the duration of drilling; and

(7) After drilling is completed, you must retain all the records listed in paragraph (h)(6) of this section for a period of 2 years at the facility, at the lessee's field office nearest the Outer Continental Shelf (OCS) facility, or at another location conveniently available to the District Supervisor.

(i) *Alternate methods.* The District Supervisor may require, or approve, more frequent testing, as well as different test pressures and inspection methods, or other practices.

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§ 250.408 Well-control drills.

(a) Well-control drills shall be conducted for each drilling crew in accordance with the following requirements:

(1) Drills shall be designed to acquaint each crew member with each member's function at the particular test station so each member can perform their functions promptly and efficiently.

(2) A well-control drill plan, applicable to the particular site, shall be prepared for each crew member outlining the assignments each member is to fulfill during the drill and establishing a prescribed time for the completion of each portion of the drill. A copy of the complete well-control drill plan shall be posted on the rig floor and/or bulletin board.

(3) The drill shall be carried out during periods of activity selected to minimize the risk of sticking the drill pipe or otherwise endangering the operation. In each of these drills, the reaction time of participants shall be measured up to the point when the des-

ignated person is prepared to activate the closing sequence of the BOP system. The total time for the crew to complete its entire drill assignment shall also be measured. This operation shall be recorded on the driller's report as "Well-Control Drill." All drills shall be initiated by the toolpusher through the raising of the float on the pit-level device, activating the mud-return indicator, or its equivalent. This operation shall be performed at least once each week (well conditions permitting) with each crew. The drills shall be timed so they will cover a range of different operations which include on-bottom drilling and tripping. A diverter drill shall be developed and conducted in a similar manner for shallow operations.

(4) *On-bottom drilling.* A drill conducted while on bottom shall include the following as practicable:

- (i) Detect kick and sound alarm;
- (ii) Position kelly and tool joints so connections are accessible from floor, but tool joints are clear of sealing elements in BOP systems, stop pumps, check for flow, close in the well;
- (iii) Record time;
- (iv) Record drill-pipe pressure and casing pressure;
- (v) Measure pit gain and mark new level;
- (vi) Estimate volume of additional mud in pits;
- (vii) Weight sample of mud from suction pit;
- (viii) Check all valves on choke manifold and BOP system for correct position (open or closed);
- (ix) Check BOP system components and choke manifold for leaks;
- (x) Check flow line and choke exhaust lines for flow;
- (xi) Check accumulator pressure;
- (xii) Prepare to extinguish sources of ignition;
- (xiii) Alert standby boat or prepare safety capsule for launching;
- (xiv) Place crane operator on duty for possible personnel evacuation;
- (xv) Prepare to lower escape ladders and prepare other abandonment devices for possible use;
- (xvi) Determine materials needed to circulate out kick; and
- (xvii) Time drill and enter drill report on driller's report.

(5) *Tripping pipe.* A drill conducted during a trip shall include the following as practicable:

- (i) Detect kick and sound alarm;
- (ii) Install safety valve, close safety valve;
- (iii) Position pipe, prepare to close annular preventer;
- (iv) Install inside preventer, open safety valve;
- (v) Record time;
- (vi) Record casing pressure;
- (vii) Check all valves on choke manifold and BOP system for correct position (open or closed);
- (viii) Check for leaks on BOP system component and choke manifold;
- (ix) Check flow line and choke exhaust lines for flow;
- (x) Check accumulator pressure;
- (xi) Prepare to extinguish sources of ignition;
- (xii) Alert standby boat or prepare safety capsule for launching;
- (xiii) Place crane operator on duty for possible personnel evacuation;
- (xiv) Prepare to lower escape ladders and prepare other abandonment devices for possible use;
- (xv) Prepare to strip back to bottom; and
- (xvi) Time drill and enter drill report on driller's report.

(b) A well-control drill may be required by a Minerals Management Service (MMS) authorized representative after consulting with the lessee's senior representative present.

§ 250.409 Diverter systems.

(a) When drilling a conductor or surface hole, all drilling units shall be equipped with a diverter system consisting of a diverter sealing element, diverter lines, and control systems unless otherwise approved by the District Supervisor for floating drilling operations. The diverter system shall be designed, installed, and maintained so as to divert gases, water, mud, and other materials away from the facilities and personnel.

(b) No later than May 31, 1990, diverter systems shall be in compliance with the requirements of this section. The requirements applicable to diverters which were in effect April 1, 1988 shall remain in effect until May 31, 1990.

(c) The diverter system shall be equipped with remote-controlled valves in the flow and vent lines that can be operated from at least one remote-control station in addition to the one on the drilling floor. Any valve used in a diverter system shall be full-opening. No manual or butterfly valve shall be installed in any part of the diverter system. There shall be a minimum number of turns in the vent line(s) downstream of the spool outlet flange and the radius of curvature of turns shall be as large as practicable. All right-angle and sharp turns shall be targeted. Flexible hose may be used for diverter lines instead of rigid pipe if the flexible hose has integral end couplings. The entire diverter system shall be firmly anchored and supported to prevent whipping and vibration. All diverter control instruments and lines shall be protected from physical damage from thrown and falling objects.

(d) For drilling operations conducted with a surface wellhead configuration, the following shall apply:

(1) If the diverter system utilizes only one spool outlet, branch lines shall be installed to provide downwind diversion capability; and

(2) No spool outlet or diverter line internal diameter shall be less than 10 inches, except that dual spool outlets are acceptable provided that each outlet has a minimum internal diameter of 8 inches and that both outlets are piped to overboard lines and that each line downstream of the changeover nipple at the spool has a minimum internal diameter of 10 inches.

(e) For drilling operations conducted where a floating or semisubmersible type of drilling vessel is used and drilling fluids are circulated to the drilling vessel, the following shall apply:

(1) If the diverter system utilizes only one spool outlet, branch lines shall be installed to provide downwind diversion capability;

(2) No spool outlet or diverter line internal diameter shall be less than 12 inches; and

(3) Dynamically positioned drill ships may be equipped with a single vent line provided appropriate vessel heading is maintained to allow for downwind diversion.